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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/724,937	11/28/2000	Serguei Y. Osokine	A-70044/RMA	7637

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EXAMINER	
EDELMAN, BRADLEY E	

ART UNIT	PAPER NUMBER
2153	

DATE MAILED: 04/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/724,937	OSOKINE, SERGUEI Y.	
	Examiner	Art Unit	
	Bradley Edelman	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 November 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4, 8, 9*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office action is a first action on the merits of this Application. Claim 1 is presented for examination.

Specification

1. The disclosure is objected to because of the following informalities:

a. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

Pages 7 and 8 of the specification include embedded hyperlinks that must be removed.

b. Page 8, line 5 appears to contain a typographical error. The word "Get" appears misplaced, and should perhaps read "GNet."

c. The abstract of the disclosure is objected to because it contains more than 150 words. Correction is required. See MPEP § 608.01(b).

Drawings

2. The drawings are objected to for the following reasons:

a. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed features must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

b. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because none of the reference signs shown in the drawings are mentioned in the description (see, e.g., Fig. 1, labels 101-1, 101-2, 120-1, specific node numbers, etc.).

A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

3. Claim 1 of this application conflicts with claim 1 of Application No. 10/115,861. 37 CFR 1.78(b) provides that when two or more applications filed by the same applicant contain conflicting claims, elimination of such claims from all but one application may be required in the absence of good and sufficient reason for their retention during pendency in more than one application. Applicant is required to either cancel the conflicting claims from all but one application or maintain a clear line of demarcation between the applications. See MPEP § 822.

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to

identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claim 1 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 1 of copending Application No. 10/115,861. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The claims in the two applications are identical, as shown in the following table:

This Application (09/724,937)	Application No. 10/115,861
A method for controlling the flow of information in a distributed computing system, said method comprising: Controlling the outgoing flow of information including requests and responses on a network connection to that no information is sent before previous portions of information are received to minimize connection latency;	A method for controlling the flow of information in a distributed computing system, said method comprising: Controlling the outgoing flow of information including requests and responses on a network connection to that no information is sent before previous portions of information are received to minimize connection latency;

Controlling the stream of requests arriving on the connection and arbitrating which of said arriving requests should be broadcast to neighbors; and Controlling monopolization of the connection by any particular request/response information stream by multiplexing the competing streams according to some fairness allocation rules.	Controlling the stream of requests arriving on the connection and arbitrating which of said arriving requests should be broadcast to neighbors; and Controlling monopolization of the connection by any particular request/response information stream by multiplexing the competing streams according to some fairness allocation rules.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Line 6 of the claim is ambiguous and appears to contain incorrect grammar – in the phrase "network connection *to* that no information is sent," it appears that the word "to" should read "so."

b. The phrase "the stream of requests arriving on the connection" on line 6 of the claim lacks sufficient antecedent basis, and is therefore ambiguous.

c. The term "request/response" on line 10 is ambiguous. It is not clear if the "/" denotes "request or response," or "request and response," or if it has some other meaning.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oram ("Gnutella and Freenet Represent True Technological Innovation," from www.oreillynet.com/lpt/a/208, 5/12/2000), in view of Drottar et al. (U.S. Patent No. 6,343,067, hereinafter "Drottar"), and further in view of Byrn et al. (U.S. Patent No. 5,533,020, hereinafter "Byrn").

Regarding claim 1, Examiner has interpreted the word "to" on line 4 as meaning "so." Examiner has also interpreted the term "the stream" on line 6 as meaning "a

stream," and has interpreted the term "request/response" on line 8 of the claim as meaning "request or response."

In considering claim 1, as understood, Oram discloses a method for controlling the flow of information in a distributed computing system, said method comprising:

Controlling the outgoing flow of information including requests and responses on a network connection (p. 1, "Gnutella basics"; p. 3, "How does the system stop searching?" wherein setting a time-to-live (TTL) controls the outgoing flow of information from a computer connected to the network);

Controlling a stream of requests arriving on the connection and arbitrating which of said arriving requests should be broadcast to neighbors (p. 3, "How does the system stop searching?" wherein setting a TTL controls whether requests should be broadcast to each connected computer's neighbors, such that the stream of requests *arriving* on connections is also controlled by the TTL); and

Controlling monopolization of the connection by any particular request or response information stream (i.e. the TTL also reduces monopolization of a connection by not sending packets to neighbors when the packets get too old, thus preventing a single response or request from propagating across the connection multiple times).

See also, "The Gnutella Protocol Specification v0.4," from www.ovmj.org/GNUnet/papers/gnutella_protocol.pdf, describing more in depth the TTL feature used in the Gnutella 0.4 Protocol.

However, Oram does not disclose first that the outgoing flow is controlled so that no information is sent before previous portions of information are received to minimize

connection latency, or second that the monopolization is controlled by multiplexing the competing streams according to some fairness allocation rules. Nonetheless, both of these methods of control are well known in distributed computing networks, as evidenced by Drottar and Byrn respectively.

First, in a similar art, Drottar discloses a flow control system for a distributed computing network, wherein one method for flow control includes a "Stop and Wait" protocol wherein a computer only sends additional information after previous portions of information are received (col. 1, lines 34-37, 48-50). This reduces latency of the system because it prevents the computer from sending multiple packets at once, and thus reduces the traffic on the network. Given this teaching, a person having ordinary skill in the art would have readily recognized the desirability and advantages of including this flow control method in the system taught by Oram, in order to reduce overall traffic on the network, thereby reducing network latency. Thus, it would have been obvious to include the "Stop and Wait" protocol for information packets sent in the system taught by Oram, to reduce system latency.

Second, in a similar art, Byrn discloses a client/server flow control system for sending requests and obtaining responses among computers on a network (col. 1, lines 30-40), wherein monopolization of network resources is controlled by multiplexing competing streams according to some fairness allocation rules (col. 1, lines 11-15, "in a packet based communication network which supports the simultaneous flow of multiple virtual connections (VC) through each physical communication links, packets or cells (cells are fixed size packets) belonging to different virtual connections will be interleaved

[i.e. multiplexed] as they are transmitted onto the communication link"; col. 1, line 65 – co.. 2, line 1, "these network scheduling algorithms are based on best effort transmission schemes, whereby each user may be able to get a fair share of the network bandwidth"). Given the teaching of Byrn, a person having ordinary skill in the art would have readily recognized the desirability and advantages of multiplexing the competing streams in Oram, according to a fairness allocation rule, as taught by Byrn, so that each of the multiple nodes in the system taught by Oram "is able to get a fare share of the network bandwidth." Therefore, it would have been obvious to include the multiplexing scheme taught by Byrn in the combined flow control system of Oram and Drottar.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is (703) 306-3041. The examiner can normally be reached on Monday to Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on (703) 305-4792. The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

For all correspondences: (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Bradley Edelman

BE
April 23, 2004